## **Claims**

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1. A method for preparing 2,5-dimethylphenylacetic acid, characterized in that p-xylene is converted with chloroacetyl chloride in a Friedel-Crafts reaction into 2-chloro-1-(2,5-dimethylphenyl)ethanone, which is reacted with the compound of the formula (II)

$$HO-CH_2-X-CH_2-OH$$
 (II)

in which

X is a direct single bond,  $CH_2$ ,  $CHCH_3$ ,  $C(C_2H_5)_2$ ,  $C(CH_3)_2$  or  $C(C_2H_5)_2$ , to give the compound of the formula (III)

in which

X has the meaning indicated above;

the compound of the formula (III) is then rearranged to give a mixture of the formulae (IV) and (V)

in which

X has the meanings indicated above,

and the latter is then hydrolyzed to 2,5-dimethylphenylacetic acid.

- 2. The method for preparing 2,5-dimethylphenylacetic acid as claimed in claim 1, where X is a direct single bond, CH<sub>2</sub>, C(CH<sub>3</sub>)<sub>2</sub> or C(C<sub>2</sub>H<sub>5</sub>)<sub>2</sub>.
- 3. The method for preparing 2,5-dimethylphenylacetic acid as claimed in claim 1, where X is a direct single bond,  $C(CH_3)_2$  or  $C(C_2H_5)_2$ .
- 4. A compound of the formula (III)

10 in which

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X has the meanings indicated above.